



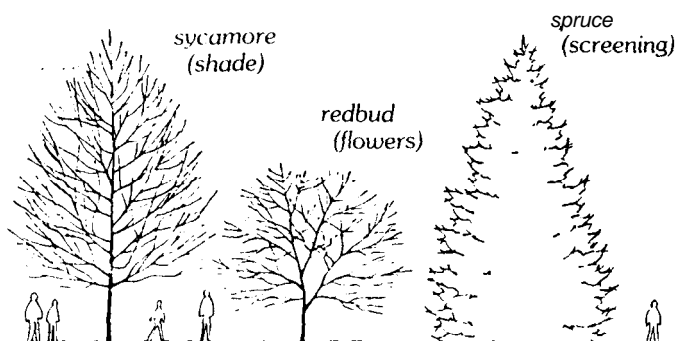
Urban and Community Forestry



PURCHASING TREES

FINDING THE RIGHT TREE

Species selection is critical to insure that a tree will "fit" its planting site. A tree's future size, shape, and overall appearance must be known before purchase. Other considerations are foliage texture and density, flowers, fruits and fall coloration. Some kinds of trees are very particular about sunlight, moisture, and soils. Others are less so. Consult good references or talk to a nursery owner or other professional about selecting the right tree for the job.



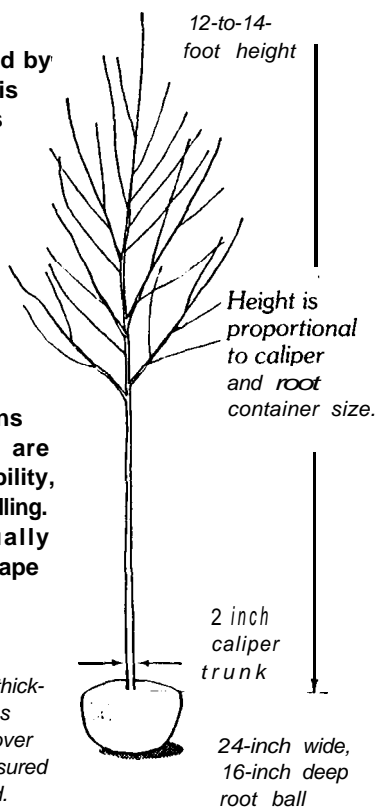
Know how trees will develop before planting so they may be used to best advantage.

PURCHASE SIZE

Tree size are measured by **height** or **caliper**. Height is used for deciduous trees up to 8 feet tall, and for evergreen trees. Caliper, or trunk diameter near the ground, is used for deciduous trees over 8 feet tall. Tree sizes increase by one-quarter or one-half inch caliper increments.

Important considerations for selecting tree sizes are location, purpose, availability, cost and difficulty of handling. Very large trees are usually best installed by a landscape contractor.

CALIPER is the stem thickness measured 6 inches above ground. Trees over 4-inch caliper are measured 12 inches above ground.



Balled and Burlapped



Container Grown



Bare Root



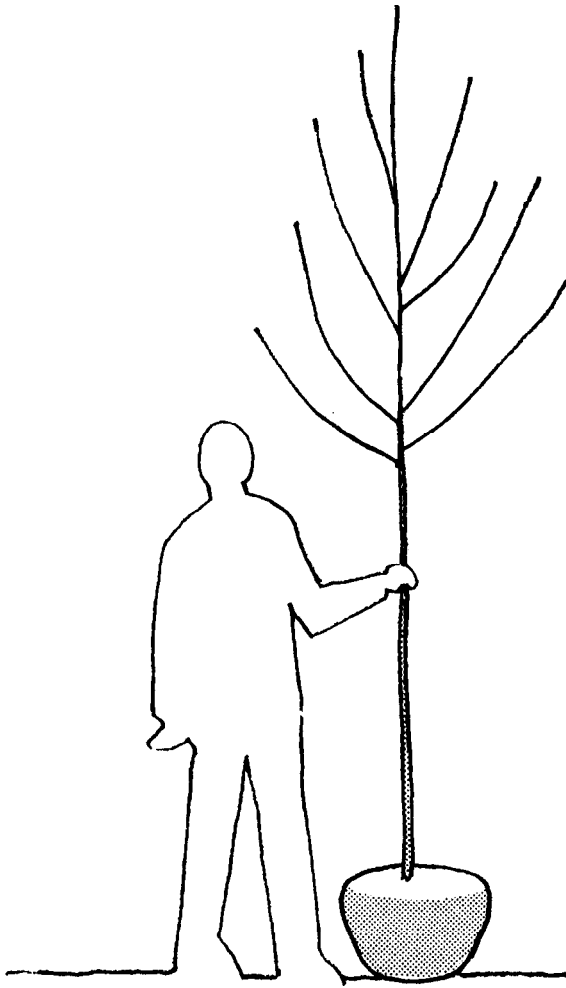
Potted

ROOTS

Several methods are used to package tree roots, each influenced by tree species, size, or ease of transportation.

- ▲ **Balled and burlapped trees** are dug from a nursery bed with roots in a ball of earth, then wrapped in burlap. Even though trees may be carefully grown and lifted, many roots are lost. The earth ball must be kept moist to prevent drying.
- ▲ **Potted trees** are dug from a nursery bed, then placed into a container. Containers may be hard or soft walled, but should be removed before planting. Soil in pots must be kept moist before planting.
- ▲ **Bare rooted trees** are also dug from a nursery bed, but soil is removed. They are easier to transport, but much more susceptible to drying. Roots may be wrapped in sphagnum moss or other packing material to hold moisture. Bare rooted trees are usually less costly, but must be handled and planted carefully.
- ▲ **Container grown trees** are raised directly in a pot or container. Although the entire root system is maintained, roots may become tightly encircled if left too long in the container. This may cause future problems for the tree.

All containers should be removed prior to planting.



Purchased trees should have these desirable characteristics.

- Long, vigorous branches on current year's growth. Well developed buds.*
- Pleasing proportion of height to spread. Well developed lateral branches.*
- Generally straight trunk with absence of wounds.*
- Firm, moist root ball or container soil.*

1 1/4 - inch caliper tree with balled and burlapped roots.

Deciduous Trees

Size Root Ball

5 to 6 ft.	55 lbs.
6 to 8 ft.	90 lbs.
8 to 10 ft.	130 lbs.
1 1/4 in. caliper	185 lbs.
1 1/4 in. caliper	225 lbs.
2 in. caliper	390 lbs.



Evergreens

Size Root Ball

3 ft.	90 lbs.
4 ft.	130 lbs.
5 ft.	225 lbs.

Some standard tree sizes and root ball weights.

COSTS

Tree costs depend on size, root condition, species, method of growth or culture, and origin. Relative prices of trees generally indicate quality, but not always. When estimating the total cost of a planting project, be sure to include the expense of labor, tools, materials and delivery along with tree costs. Also include costs for maintenance of trees after they are planted.

TRANSPORTING AND STORING TREES

Remember trees are *alive* and should be treated with respect. Protection from drying is critical. Roots must be kept moist. Foliage, branches and trunks can also dry out. If trees will be transported by truck, be sure to keep them covered for protection from winds.

It is best to plant trees as soon as possible after they are received. If they must be stored, place them away from excessive exposure to sun and wind. Cover balled and burlapped or bare rooted tree roots with wood chips, sand, or loose earth.

Trees should be lifted by their container or root ball to avoid breaking fine roots and to protect trunks.

